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Genetic Variations of V3 and C3 regions in gp120 protein of HIV-1 env gene

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Abstract

HIV-associated neurocognitive disorder (HAND) is an important cause of morbidity of HIV patients. The development of neurological disease among individuals having an HIV infection is variable. The env sequences of HIV-1 are important for cell entry and neurotropism. The env sequences vary among individuals having HIV infection. Hence the development of neurotoxicity differs among individuals with HIV infection. So far, none of the studies reported the mechanism of neurotoxicity in astrocytes. Hence we comprehended the genetic profile of the gp120 protein of HIV-1 env gene which influences the pathogenesis of neurocognitive diseases

Description: Pathogenesis of HAND is influenced by HIV-1 env sequences. The gp120 glycoprotein serves as a determinant to cross the blood-brain barrier and maintain neurocognitive impairments. The persistence of env sequences within the CNS leads to neurovirulent features and neurotoxicity. The evolution of the env gene is a continuing process that contributes to neurocognitive disease severity.

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Biography

Hari Om Singh is currently working for 1Department of Molecular Biology, ICMR-National AIDS Research Institute, Pune, India. He has attended and gave his presentation on Genetic Variations of V3 and C3 regions in gp120 protein of HIV-1 env gene. He has published papers in many international reputed scopus journals.